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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC			BORLINGHAUS, JASON M	
1420 FIFTH AVENUE			ART UNIT	
SUITE 2800			PAPER NUMBER	
SEATTLE, WA 98101-2347			3693	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,088

Applicant(s)

KEITH, CHRISTOPHER

Examiner

Jason M. Borlinghaus

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/29/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/29/06 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7 – 16 and 18 - 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hull (Hull, John C. *Introduction to Futures & Options Markets*. 2nd Edition. Prentice-Hall. 1995. pp. 4 – 6, 11, 26, 33 – 34 and 188 - 190) in view of Disclosed Prior Art (specification, p. 27, lines 1 - 6) and Options (The Options Institute. *Options: Essential Concepts & Trading Strategies*. 3rd Edition. McGraw-Hill. 1999. p. 420).

Regarding Claim 7 and 24, Hull discloses a method comprising:

- receiving an option request from a user (investor). ("To illustrate how an options contract gets initiated, we suppose an investor instructs his or her broker to buy one call option contract on IBM stock with a strike price of \$50 and an exercise date of October." – see p. 4);
- requesting the option from a market process (floor broker). ("The broker will relay these instructions to a trader on the floor of the CBOE. This trader will then find another trader who wants to sell one October call contract on IBM with a strike price of \$50." – see p. 4);
- the market process being a computer program (automated trading system) executing on a computer system (automated trading system) and implementing rules of engagement by which information or merchandise is exchanged between trading processes (traders). (see p. 33);
- wherein the option request is received (by broker) as a result of user (investor) trading activity (request). (see p. 4)

Hull does not teach underlined limitations - a method comprising:

- automatically receiving a short term option request from a user;
- the term of the option being about ten seconds or less;
- automatically requesting the short term option from a market process;
- wherein the short term option request is automatically received as a result of user trading activity without an explicit request for the short term option from the user.

Disclosed Prior Art discloses a method comprising:

- receiving a short term option request from a user. ("So-called 'forwards' enable a trader to negotiate the expiration time. In conventional human-directed markets, a market maker will often grant a short-term option to a trade, sometimes for a fee and sometimes for a favor." – see p. 27, lines 1 - 6); and
- the market process being a computer program (automated facility) executing on a computer system (automated facility) and implementing rules of engagement by which information or merchandise is exchanged between trading processes (traders). (see p. 26, line 31 – p. 27, line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull by incorporating short term option requests, as was disclosed by Disclosed Prior Art, to incorporate another type of option into the existing option markets and utilizing the same option request/receipt methodology.

Neither Hull nor Disclosed Prior Art teaches a short term option request for an option term less than about ten seconds. However, Disclosed Prior Art does disclose

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the ability "to negotiate the expiration time." (see p. 27, line 2). Furthermore, Options discloses that that some traders in financial instruments, termed scalpers, hold positions for extremely short time durations, "usually 10 seconds to 3 minutes. (see p. 420). As parties can negotiate the expiration time, as disclosed by Disclosed Prior Art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull and Disclosed Prior to allow for the negotiation of any option term that the inventor desired. *In re Kuhle*, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975). Furthermore, as there are traders that hold positions of financial instruments of approximately 10 seconds, as disclosed by Options, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Disclosed Prior Art and Hull by incorporating the ability for short term option expiration time to be measured as approximately ten seconds, as financial instruments are already traded over such short durations.

Neither Hull, Disclosed Prior Art nor Options teaches that the short option method is automatic nor automated. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192. Furthermore, provision than an activity, method and/or step occurs automatically means that such activity, method and/or step is performed without explicit instruction, thereby being automatic.

Regarding Claims 8 - 10, Hull discloses a method further comprising:

- selecting one of a plurality of markets from which to request the short term option. ("Most exchanges offering future contracts now also offer options on these futures contracts. Thus, the Chicago Board of Trade offers options on corn futures, the Chicago Mercantile Exchange offers options on live cattle futures, the International Monetary Markets offers options on foreign currency futures, and so one. Both options and futures have been outstandingly successful." – see pp. 5 - 6 – establishing a plurality of markets through which to request the short term option. "Arbitrage involves locking a riskless profit by simultaneously entering into transactions in two or more markets." – see p. 11 - establishing that market participants can select one market, if not a plurality of markets, in which to operate);
- receiving notice from the market process (floor broker) that the short term option was granted. ("This trader will then find another trader who wants to sell one October call contract on IBM with a strike price of \$50. A price will be agreed upon and the deal will be done... Therefore, the investor must arrange for \$600 to be remitted to the exchange through his or her broker. The exchange will then arrange for this to be passed on to the party on the other side of the transaction" – see p. 4 – It is inherent that the floor broker would notify the user that the short term option was granted, if for no other reason than by virtue of the fact that the user must now pay for the secured option).

- further comprising forwarding the notice that the short term option was granted to the user. (supra – see p. 4)

Neither Hull, Disclosed Prior Art nor Options teach that the short option method is automatic nor automated. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Regarding Claim 11, neither Hull, Disclosed Prior Art nor Options teaches a short term option request for an option term less than about ten seconds. However, Disclosed Prior Art does disclose the ability “to negotiate the expiration time.” (see p. 27, line 2). Furthermore, Options discloses that that some traders in financial instruments, termed scalpers, hold positions for extremely short time durations, “usually 10 seconds to 3 minutes. (see p. 420). As parties can negotiate the expiration time, as disclosed by Disclosed Prior Art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull and Disclosed Prior to allow for the negotiation of any option term that the inventor desired. *In re Kuhle*, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975). Furthermore, as there are traders that hold positions of financial instruments of approximately 10 seconds, as disclosed by Options, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Disclosed Prior Art and Hull by incorporating the

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ability for short term option expiration time to be measured as approximately ten seconds, as financial instruments are already traded over such short durations.

Regarding Claim 12, Hill discloses a method:

- wherein the steps of automatically receiving (willingness to sell) and requesting (willingness to buy) are performed by a trading process (system), the trading process (system) being a computer program configured to act as an agent (buyer/seller computer terminal logged into the system) that, when executed, represents an order (willingness to buy/sell) from the user and interacts with the market process (system) according to the rules of engagement (matching/system rules). ("Under an automated system, buyer and seller would be matched by a computer. A potential buyer would sit at a computer terminal and indicate the price at which he or she is willing to buy. This price would be relayed throughout the system. Another trade, also sitting at a computer terminal and logged into the system, could indicate the price at which he or she is willing to sell at the buyer's price by pressing the appropriate the appropriate keys." – see p. 33).

Regarding Claim 13, Hull discloses a method comprising:

- receiving, at a computer program (automated trading system) executing on a computer system (automated trading system) and implementing rules of engagement by which information or merchandise is exchanged

between trading processes (traders), a request for a financial instrument (future). (see p. 33);

- receiving, a request for an option. (supra – see p. 4); and
- granting the option. (supra – see p. 4)

Hull does not teach the underlined limitations - a method comprising:

- receiving a request for a short term option having a term of about ten seconds or less; and
- automatically granting the short term option.

Disclosed Prior Art discloses a method comprising:

- receiving, at a computer program (automated facility) executing on a computer system (automated facility) and implementing rules of engagement by which information or merchandise is exchanged between trading processes (traders), a request for an option. (see p. 26, line 31 – p. 27, line 2); and
- receiving and granting short term option request. (“So-called ‘forwards’ enable a trader to negotiate the expiration time. In conventional human-directed markets, a market maker will often grant a short-term option to a trade, sometimes for a fee and sometimes for a favor.” – see p. 27, lines 2 - 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull by incorporating short term option requests,

as was disclosed by Disclosed Prior Art, to incorporate another type of option into the existing option markets and utilizing the same option request/receipt methodology.

Neither Hull nor Disclosed Prior Art teaches a short term option request for an option term less than about ten seconds. However, Disclosed Prior Art does disclose the ability "to negotiate the expiration time." (see p. 27, line 2). Furthermore, Options discloses that that some traders in financial instruments, termed scalpers, hold positions for extremely short time durations, "usually 10 seconds to 3 minutes. (see p. 420). As parties can negotiate the expiration time, as disclosed by Disclosed Prior Art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull and Disclosed Prior to allow for the negotiation of any option term that the inventor desired. *In re Kuhle*, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975). Furthermore, as there are traders that hold positions of financial instruments of approximately 10 seconds, as disclosed by Options, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Disclosed Prior Art and Hull by incorporating the ability for short term option expiration time to be measured as approximately ten seconds, as financial instruments are already traded over such short durations.

Neither Hull, Disclosed Prior Art nor Options teaches that the short option method is automatic nor automated. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means

to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Regarding Claims 14 - 15, Claims 14 - 15 recite similar limitations and/or would have been obvious based upon Claims 11 - 12 rejected above, and are therefore rejected using the same art and rationale as applied in the rejection of Claims 11 - 12.

As for additional and/or differing claim limitations, neither Hull, Disclosed Prior Art nor Options teaches a short term option request for an option term less than one second. However, Disclosed Prior Art does disclose the ability "to negotiate the expiration time." (see p. 27, line 2). As parties can negotiate the expiration time, as disclosed by Disclosed Prior Art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior and Options to allow for the negotiation of any option term that the inventor desired. *In re Kuhle*, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975).

While trading and/or managing options of such short term duration may or may not be beyond a human's ability to manually perform, the usage of a computerized system to compute, process and/or transact information faster than a human's manual capability is old and well known in the art of information systems and computer science. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art and Options to incorporate abilities into an automated system that would require speed that may or may not be beyond a human's ability to manually perform, allowing an automated system to capture all the benefits inherent in an automated system.

Regarding Claim 16, Hull discloses a method:

- wherein the request includes the term of the option. (supra – see p. 4).

Hull does not teach a method:

- wherein the request includes the term of the short term option.

Disclosed Prior Art discloses a method comprising:

- a request for a short term option. (“So-called ‘forwards’ enable a trader to negotiate the expiration time. In conventional human-directed markets, a market maker will often grant a short-term option to a trade, sometimes for a fee and sometimes for a favor.” – see p. 27 – It is inherent that the request for a negotiated short term option would include the term, the negotiated item, itself.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art and Options by incorporating short term option terms, as was disclosed by Disclosed Prior Art, into the option request to provide information to the recipient concerning the nature of the option requested.

Regarding Claims 18 - 19, Hull discloses a method:

- wherein the option request indicates a desired resource (options’ underlying assets), and further comprising automatically reserving the desired resource (funds in margin account to cover the value of options’ underlying assets) until the expiration time. (“When an investor writes an option, he or she is required to maintain funds in a margin account. This is

because the investor's broker and the exchange want to satisfied that the investor will not default if the options is exercised." – see p. 188); and

- releasing the reserved resource (funds in margin account) at the expiration of the option when the resource has not been used (option has not been exercised). ("Funds can be withdrawn from the margin account when the calculation indicates that the margin required is less than the margin account." – see p. 189).

Hull does not teach a method:

- wherein the short term option request indicates a desired resource, and further comprising automatically reserving the desired resource until the expiration time; and
- automatically releasing the reserved resource at the expiration of the short term option when the resource has not been used.

Disclosed Prior Art discloses a method comprising:

- receiving and granting a short term option request. ("So-called 'forwards' enable a trader to negotiate the expiration time. In conventional human-directed markets, a market maker will often grant a short-term option to a trade, sometimes for a fee and sometimes for a favor." – see p. 27, lines 2 - 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art and Options by incorporating short term option requests, as was disclosed by Disclosed Prior Art, to

incorporate another type of option into the existing option markets and utilizing the same option trading protocols.

Neither Hull, Disclosed Prior Art nor Options teaches that the releasing of funds is automatic nor automated. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Regarding Claim 20, Hull discloses a method:

- wherein the option request indicates a price for the desired resource (options' underlying assets' value), and further comprising receiving a stop exercise instruction (stop order). ("A stop order or a stop-loss order also specifies a particular price... Suppose a stop order to sell at \$30 is issued when the price is \$35." – see p. 34); and
- pairing the reserved resource (margin funds) at the price in the request in response to the stop exercise instruction. ("In effect, a stop order becomes a market order as soon as the specified price has been hit." – see p. 34. "The main task of the clearinghouse is to keep track of all transactions that take place during a day so that it can calculate the net position of each of its members." – see p. 26. It is inherent that when a stop exercise instruction is implemented and an order is placed, that the clearinghouse

pairs the options purchased in the market to the margin funds maintained to prevent default on that purchased option).

Hull does not teach a method:

- wherein the short term option request indicates a price for the desired resource; and further comprising receiving a stop exercise instruction, and automatically pairing the reserved resource at the price in the request in response to the stop exercise instruction.

Disclosed Prior Art discloses a method comprising:

- receiving and granting a short term option request. ("So-called 'forwards' enable a trader to negotiate the expiration time. In conventional human-directed markets, a market maker will often grant a short-term option to a trade, sometimes for a fee and sometimes for a favor." – see p. 27, lines 2 - 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art and Options by incorporating short term option requests, as was disclosed by Disclosed Prior Art, to incorporate another type of option into the existing option markets and utilizing the same option trading protocols.

Neither Hull, Disclosed Prior Art nor Options teaches that the releasing of funds is automatic nor automated. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace

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manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Regarding Claim 21 – 23, Hull discloses a method:

- wherein the exercise instruction (stop order) is received from a trading process (trader) (supra. – see p. 4 – It is inherent that a stop exercise instruction is received from a trading process, either on his own behalf or on the behalf of a represented investor, by virtue of it being executed in the marketplace);
- wherein a platform process (automated system) is utilized. (“Under an automated system, buyer and seller would be matched by a computer. A potential buyer would sit at a computer terminal and indicate the price at which he or she is willing to buy. This price would be relayed throughout the system. Another trade, also sitting at a computer terminal and logged into the system, could indicate the price at which he or she is willing to sell at the buyer’s price by pressing the appropriate the appropriate keys.” – see p. 33); and
- wherein receiving and granting is performed by a market process (floor brokers). (supra – see p. 4).

Hull does not teach a method:

- wherein the exercise instruction is received from a trading process.
- wherein the exercise instruction is received from a platform process.

- wherein the automatically receiving and granted are performed by a market process.

Neither Hull, Disclosed Prior Art nor Options teaches that the exercise order transmission, receipt or execution is automatic nor automated. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Regarding Claims 25 – 26, neither prior art reference(s) teaches underlined claim limitations – a method wherein:

- the short term option request is automatically received as a result of processing a linked order received from the user; and
- the automatically receiving and requesting are performed by multiple trading processes that are simultaneously and independently representing multiple orders of the user.

Submission of linked orders, such as an option swap, by investors and/or processing of such orders is old and well known in the art of financial services. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art and Options by incorporating the receipt of an option request based upon the processing of a received linked order, such as an option swap, as each component order of the linked order would be a option request.

Parallel processing information and/or simultaneously performing multiple independent functions on a computerized system is old and well known in the art of information technology and computer science. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art and Options to perform multiple trading process simultaneously and independently as such is standard and/or convention in computerized processing of information.

Claims 1 – 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hull in view of Disclosed Prior Art, Options and Rosen (US Patent 5,453,601).

Regarding Claims 1 - 2, Hull discloses a method comprising:

- receiving a request for an option expiration (exercise date/time) from a market process (floor trader). (“To illustrate how an options contract gets initiated, we suppose an investor instructs his or her broker to buy one call option contract on IBM stock with a strike price of \$50 and an exercise date of October. The broker will relay these instructions to a trader on the floor of the CBOE. This trader will then find another trader who wants to sell one October call contract on IBM with a strike price of \$50.” – see p. 4 – It is inherent in finding another trader, that another trader would receive the request for the option); and
- the market process being a computer program (automated trading system) executing on a computer system (automated trading system) and

implementing rules of engagement by which information or merchandise is exchanged between trading processes (traders). (see p. 33).

Hull does not teach the underlined limitations - a method comprising:

- automatically receiving a timer request for a timer to measure the duration of a short term option, wherein the duration of the option is about ten seconds of less, and wherein the request is received from a market process;
- in response to the timer request, automatically instantiating the timer and setting the timer to indicate the short term option expiration time; and
- automatically terminating the instance of the timer upon expiration of the short term option.

Disclosed Prior Art discloses a method comprising:

- receiving a request for a short term option expiration. ("So-called 'forwards' enable a trader to negotiate the expiration time. In conventional human-directed markets, a market maker will often grant a short-term option to a trade, sometimes for a fee and sometimes for a favor." – see p. 27, lines 2 - 6 – establishing the receipt and granting of a request for a short term option); and
- the market process being a computer program (automated facility) executing on a computer system (automated facility) and implementing rules of engagement by which information or merchandise is exchanged between trading processes (traders). (see p. 26, line 31 – p. 27, line 2).

Rosen discloses a method comprising:

- receiving a timer request (timer instructions) for a timer to measure the duration of a financial instrument (electronic note/certificate), wherein the measurement may be in seconds (see col. 16, lines 21 – 24; col. 21, lines 5 – 23); and
- in response to the timer request (timer instructions), instantiating (starting) the timer and setting the timer to indicate the financial instrument (electronic note/certificate) expiration time (expiration of validity). (see col. 16, lines 21 – 24);

Neither Hull nor Disclosed Prior Art teaches a short term option request for an option term less than about ten seconds. However, Disclosed Prior Art does disclose the ability “to negotiate the expiration time.” (see p. 27, line 2). Furthermore, Options discloses that that some traders in financial instruments, termed scalpers, hold positions for extremely short time durations, “usually 10 seconds to 3 minutes. (see p. 420). As parties can negotiate the expiration time, as disclosed by Disclosed Prior Art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull and Disclosed Prior to allow for the negotiation of any option term that the inventor desired. *In re Kuhle*, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975). Furthermore, as there are traders that hold positions of financial instruments of approximately 10 seconds, as disclosed by Options, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Disclosed Prior Art and Hull by incorporating the ability for short term option expiration time to be

measured as approximately ten seconds, as financial instruments are already traded over such short durations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art and Options by incorporating a timer, as disclosed by Rosen, to monitor the expiration date of the short term options, as the use of automated timers is standard and/or conventional to measure time durations in automated systems. Furthermore, Hull disclosed "Some brokerage firms will automatically exercise options for their clients at expiration when it is in their clients' best interest to do so." (see p. 190). Such an automatic exercise of options would indicate some management system to monitor and administer the options at expiration time and, therefore, it would have been obvious to incorporate a conventional and/or standard technology such as a timer, as disclosed by Rosen, to further manage and ensure the automatic exercise of expired options.

Initiation and/or termination of a timer function to initiate and/or terminate the measurement of time, and/or resetting of the timer function is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art, Options and Rosen by incorporating the capability of the timer, as disclosed by Rosen, to initiate and/or terminate functioning of the timer, and/or reset said timer depending upon the needs of the system, as initiating and/or terminating the functions of a timer based upon whether it is needed or not, and/or resetting a timer to more reflect a new duration period is standard and/or conventional in the art of automated systems.

None of the references teach that the above method is automatic nor automated. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Regarding Claims 3 - 5, Hull discloses a method further comprising:

- further comprising sending an option expiration notice to the market process (floor broker/Exchange). ("This trader will then find another trader who wants to sell one October call contract on IBM with a strike price of \$50. A price will be agreed upon and the deal will be done...Therefore, the investor must arrange for \$600 to be remitted to the exchange through his or her broker. The exchange will then arrange for this to be passed on to the party on the other side of the transaction" – see p. 4 – It is inherent that in the granting of a short term option expiration that the floor broker, acting as the marketplace, would be notified of its granting. Furthermore, since financial settlement occurs through the exchange, itself, it is inherent that the exchange would be notified of the granting of short term option expiration);
- wherein the timer (exercise date/time) request also includes identification of a trading process (requesting floor broker), and further comprising sending an option expiration notice to the trading process (requesting floor

broker). ("To illustrate how an options contract gets initiated, we suppose an investor instructs his or her broker to buy one call option contract on IBM stock with a strike price of \$50 and an exercise date of October. The broker will relay these instructions to a trader on the floor of the CBOE. This trader will then find another trader who wants to sell one October call contract on IBM with a strike price of \$50. A price will be agreed upon and the deal will be done... Therefore, the investor must arrange for \$600 to be remitted to the exchange through his or her broker. The exchange will then arrange for this to be passed on to the party on the other side of the transaction" – see p. 4 – It is inherent that the request includes identification of the trading process as the request is communicated through the trading process to the recipient and, furthermore, it is inherent that a notice is sent to the requesting trading process establishing whether the request was to be granted or denied); and

- creating an option manager process (management system) in response to the timer request. ("The Options Clearing Corporation (OCC)...It guarantees that the option writer will fulfill his or her obligations under the terms of the option contract and keeps a record of all long and short positions...The OCC automatically exercises stock options owned by individuals that are in the money unless specifically instructed not to do so." – see p. 190 – It is inherent that OCC possesses a manager process,

human if not computerized, by virtue of its recording, monitoring and automatically exercising options).

Hull does not teach a method further comprising:

- further comprising sending a short term option expiration notice to the market process;
- wherein the timer request also includes identification of a trading process, and further comprising sending a short term option expiration notice to the trading process; and
- creating a short term option manager process in response to the timer request.

Disclosed Prior Art discloses a method comprising:

- requesting and granting a short term option expiration. ("So-called 'forwards' enable a trader to negotiate the expiration time. In conventional human-directed markets, a market maker will often grant a short-term option to a trade, sometimes for a fee and sometimes for a favor." p. 27, lines 2 - 6 – establishing the requesting and granting of a request for a short term option).

Rosen discloses a method comprising:

- a timer to measure the expiration (expiration of validity) of a financial instrument (electronic note/certificate), wherein the measurement may be in seconds (see col. 16, lines 21 – 24; col. 21, lines 5 – 23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hull, Disclosed Prior Art, Options and Rosen by incorporating a short term option expiration, as was disclosed by Disclosed Prior Art, to allow for the market processes to offer a greater array of options products, specifically short term options with terms shorter than standard available options.

Terminating a process based upon expiration of items under its control is old and well known in the art of information technology. It would have been obvious to one of ordinary skill in the art to have modified Hull, Disclosed Prior Art, Options and Rosen to have terminated a process, such as an option manager, when the timer, as disclosed by Rosen, indicated the expiration of the items under its control, such as expired options, as the functionality of the process to further process expired items

Regarding Claim 6, Hull discloses a method:

- wherein requesting and offering are performed by a platform process.
(“Under an automated system, buyer and seller would be matched by a computer. A potential buyer would sit at a computer terminal and indicate the price at which he or she is willing to buy. This price would be relayed throughout the system. Another trade, also sitting at a computer terminal and logged into the system, could indicate the price at which he or she is willing to sell at the buyer’s price by pressing the appropriate the appropriate keys.” – see p. 33).

Neither Hull, Disclosed Prior Art nor Rosen teach a method:

- wherein the automatically receiving and setting are performed by a platform process.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art (*In re Venner*, 120 USPQ 192), especially in light of the existing relocation of some manual trading activities to an automated system.

Regarding Claim 17, Claim 17 recites similar limitations to Claims 1 and 6, in combination, and is therefore rejected using the same art and rationale as applied in the rejection of Claims 1 and 6.

Response to Arguments

Applicant's arguments filed 8/29/06 with respect to pending claims have been fully considered, and are persuasive, in part, and not persuasive, in part.

Regarding the rejection of Claims 1 – 16 in view of § 112, 2nd paragraph, examiner rescinds his previous § 112 rejection. In the previous Office Action, examiner asserted that “about ten seconds” was a vague and/or indistinct measurement of time due to the presence of the qualifier “about.” Applicant argues that, in view of caselaw, the term “about” is not “invalid for indefiniteness” and that, based upon the specification, the term “about” is utilized to differentiate between slower human response times in comparison with faster computer response times. Examiner agrees with applicant’s

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argument and explanation concerning the validity of the term “about” as a qualifier for a measurement of time.

Regarding the rejection of Claims 7 – 12 and 24 – 26, applicant argues that prior art reference(s) fail to teach a short term option having a term “being about ten seconds or less.” Applicant concentrates his arguments on the fact that no prior art reference, outside of Disclosed Prior Art obtained from the applicant’s own specification, was cited concerning this claim limitation. However, the utilization of such Disclosed Prior Art as the sole prior art reference does not negate its existence as a valid prior art reference for such claim limitation.

Applicant argues that such Disclosed Prior Art reference is “clearly discussing” conventional options of a longer time period. However, Disclosed Prior Art does disclose “a market maker will often grant a short-term option to a trader” (see p. 27, lines 3 – 4), although the market maker “is reluctant” to grant such stops for more than intervals of time measured in tens of seconds.” (emphasis added - see p. 27, lines 4 – 6). The phrase “is reluctant” indicates that short-term options that can be measured in tens of seconds do exist, although such options may be rare as market makers are reluctant to grant them. Taken in conjunction with Disclosed Prior Art’s disclosure that with “conventional options” traders are enabled “to negotiate the expiration time” (see p. 27, lines 1 – 2), examiner asserts that it would have been obvious to one of ordinary skill at the time the invention was made to have modified prior art reference(s) to account for the negotiation of any time period that the inventor desired, even for negotiation to the far end of the time measurement spectrum measured in tens of seconds.

Applicant and examiner had discussed in a previous telephone interview the fact that Disclosed Prior Art was the sole prior art reference utilized for this claim limitation. Initially, examiner was willing to consider that such a small time increment, although on the time measurement spectrum, may be to such an extreme on that time continuum as to represent a fundamental paradigm shift. However, further research indicates that options are traded among market participants with each party attempting to maintain positions with extremely short time durations, such durations being "usually 10 seconds to 3 minutes." (see p. 420).

When viewed in conjunction with the teachings of Disclosed Prior Art, examiner must reassert that short-term options having a term "being about ten seconds or less" would have been obvious to one of ordinary skill in the art at the time the invention was made. If "the expiration time" of "conventional options" can be negotiated, examiner sees no reason that options cannot be negotiated to "an option term of about ten seconds or less." This assertion is buttressed by the fact that "short-term options" already exist, market makers already measure expiration times in such minute quantities as "tens of seconds" and some traders hold positions with very short time durations of "usually 10 seconds".

Applicant also distinguishes Disclosed Prior Art as such reference is directed to conventional options and conventional human-directed markets. However, Disclosed Prior Art and Hull also disclose computerized trading systems. Computers and/or computerized systems performing functions faster than human performance ability is notoriously old and well known in the art of information technology and computer

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science. Therefore, examiner asserts that while a human-directed market may or may not be able to process transactions of such duration, a computerized market system, as disclosed by Disclosed Prior Art and Hull, would allow for the processing of short-term options of such duration.

Regarding the applicant's argument that there is no suggestion to combine and/or modify the references in the prior art, the Courts have stated that “[a] suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references...The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art... there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 78 USPQ2d 1329, 1336 (CA FC 2006). Examiner asserts that he can and/or has provided such “articulated reasoning” to support the legal conclusion of obviousness.

Regarding the applicant's arguments concerning the §103 rejection of Claims 1- 6 and 13 - 23, as applicant's arguments concerning Claim 13 - 23 are similar to applicant's arguments concerning Claims 7 – 12 and 24 – 26, in part, examiner refutes applicant's arguments using the same art and rationale as applied against applicant's arguments concerning Claims 7 – 12 and 24 – 26.

As to applicant's arguments that deviate from those offered concerning Claims 1 – 6 and 13 – 33, examiner also wishes remind applicant that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Rosen does disclose a utilizing a timer or clock to indicate an expiration time for financial instruments. Furthermore, Rosen discloses, "For security reasons, all electronic notes expire after a preset time." (emphasis added – see col. 6, lines 50 – 57). Rosen also discloses, "Clock/Timer. Controls transaction timeout expiration, expiration of the validity of the electronic notes, expiration of the certificate_and general clock functions." (emphasis added – see col. 16, lines 20 – 24).

Taken in conjunction with the prior art of Hull, Disclosed Prior Art and Options, it would have been obvious to modify the automated options trading system to incorporate an automated timer, as disclosed by Rosen, setting the timer to account for the duration of said options in order to monitor the expiration of said options and/or initiate and/or terminate functions of the trading system which are dependent upon the expiration of said options.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Borlinghaus whose telephone number is (571) 272-6924. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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PRIMARY EXAMINER